

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claim 2. Please amend claim 8, as follows:

Listing of Claims:

1-7. (Cancelled)

8. (Currently amended) A computer readable medium having instructions stored thereon for causing a computer to perform a method for assigning an order to a schedule having an opening identified by iterating through a list of shifts potentially having sufficient time to accommodate the order and through a list of virtual free time blocks for each shift in the list of shifts, a virtual free time block representing an amount of time in which an order may be assigned by bumping assigned orders in a shift, after a customer has specified an appointment window in the schedule, the method comprising:

where a customer has specified both an appointment window and an opening for the order,

generating a list of schedulable time blocks for a shift identified in the opening, the schedulable time blocks having at least one of a free time block and a virtual free time block and defining a range of time having openings to which the order can be assigned;

intersecting the opening and the appointment window to obtain a time range defined by the overlap of the opening and the appointment window; and

assigning the order to the opening if a schedulable time block from the list of schedulable time blocks includes the opening and the opening is within the time range; and

where a customer has specified an appointment window and not specified an opening for the order,

checking a list of openings for overlap with the appointment window;

generating a list of schedulable time blocks if there is no overlap, each of the schedulable time blocks in a list having at least one of a free time block and a virtual free time block and defining a range of time having openings to which the order can be assigned, ~~the~~

~~virtual free time block representing an amount of time in which an order may be assigned by bumping orders already assigned in a shift of the schedule; and~~

assigning the order to the schedule if there is an opening in the list of openings that overlaps with the appointment window or an opening in the list of schedulable time blocks that overlaps with the appointment window.

9. (Original) The method of claim 8, further comprising updating a tour time of the shift, wherein updating includes incrementing the time required to travel to the order and from the order to a next order, wherein updating includes incrementing a booked time for the shift by an amount of time needed for traveling to the order and an amount of time needed to work on the order, and wherein updating includes adjusting a load level of the shift to account for the order.

10. (Original) The method of claim 9, further comprising aggregating at least two orders according to an aggregation criteria.

11. (Original) The method of claim 10, further comprising defragmenting a set of free time blocks in the shift.

12. (Original) The method of claim 11, further comprising committing the shift, which has been modified to fit the order, to a database.